

REMARKS

Applicant has studied the Office Action dated November 29, 2005 and has made amendments to the claims. Claims 1-20 are pending. Claims 1, 7, 8 and 11 are independent claims. Claims 1-6, 8-11, 14, 17, 19 and 20 have been amended. No new matter has been entered. It is submitted that the application, as amended, is in condition for allowance. Reconsideration and reexamination are respectfully requested.

Amendments to Claims

Claims 2, 4, 9 and 14 have been amended to correct typographical and grammatical errors and to more clearly describe the invention. Claim 11 has been amended to correct informalities noted by the Examiner. No new matter has been added as the amendments have support in the specification and drawings as originally submitted. The amendments are not related to patentability.

Objections to Claims

The Examiner objected to claims 11-14 due to informalities. Specifically, the Examiner asserted that acronyms "RDS" and "RLL" are not defined in claim 11.

With this paper, claim 11 has been amended to define the first occurrence of "RDS" and "RLL." It is respectfully submitted that the grounds for the objection has been overcome and it is respectfully requested that the objection be withdrawn.

§ 102 Rejections

Claims 1, 4-8, 10, 11, 14 and 18-20 were rejected under 35 U.S.C. § 102(b) as being anticipated by Tanaka et al. ("Tanaka" U.S. Patent No. 5,912,869). This rejection is respectfully traversed.

It is respectfully noted that a proper rejection for anticipation under § 102 requires complete identity of invention. The claimed invention, including each element thereof as recited in the claims, must be disclosed or embodied, either expressly or inherently, in a single reference. Scripps Clinic & Research Found. v. Genentech Inc., 927 F.2d 1565, 1576, 18 U.S.P.Q.2d 1001,

1010 (Fed. Cir. 1991); Standard Havens Prods., Inc. v. Gencor Indus., Inc., 953 F.2d 1360, 1369, 21 U.S.P.Q.2d 1321, 1328 (Fed. Cir. 1991).

With regard to independent claim 7, it is respectfully noted that the Examiner, at paragraph 1 of page 4 of the Office action, asserts col. 17, line 50 to col. 18, line 21 of Tanaka as disclosing “evaluating the RDS of the input data block and an RDS of a previous input data block” and col. 13, ll. 11-17 of Tanaka as disclosing “to select at least one merging bit.” It is further respectfully noted that the Examiner, at paragraph 2 of page 4 of the Office action, asserts col. 22, ll. 3-25 of Tanaka as disclosing “updating the RDS for selecting at least one merging bit for a next input data block.” Applicant respectfully disagrees with the Examiner’s interpretation of Tanaka.

It is respectfully noted that col. 13, ll. 9-13 of Tanaka discloses “the conversion ... assigns at least one code word expressed by a 15-bit pattern for each 8 data bits (1 byte)” and “the MSB of the 15-bit pattern [of the code word] serves as a merging bit.” It is further respectfully noted that col. 17, line 50 to col. 18, line 21 and col. 22, ll. 3-25 of Tanaka are related to determining the “type information” for the synchronization code. Moreover, it is respectfully noted that col. 12, ll. 18-67 of Tanaka discloses the “synchronization code” is added to a “data frame” of “84 bytes” when the “data block array is ... formatted” and that addition of the “synchronization code” is separate from the “data blocks thus formatted [being] converted to code words by 8-15 conversion.”

It is respectfully submitted that, since the “merging bit” disclosed by Tanaka is “the MSB of the 15-bit pattern [of the code word]” that is “assign[ed] ... for each 8 data bits (1 byte),” the disclosure in Tanaka of the determination of the “type information” for the synchronization code added to a “data frame” of “84 bytes” is not related to the selection of the “merging bit” as asserted by the Examiner. Therefore, it is respectfully asserted that Tanaka fails to disclose evaluating the RDS of the input data block and a previous input data block to select at least one merging bit and updating the RDS for selecting at least one merging bit for a next input data block as recited in independent claim 7.

It is respectfully noted that the Examiner, at paragraph 1 of page 5 of the Office action, asserts that the assertions with regard to claims 1 and 4-6 are also applicable to the rejection of independent claim 11. Applicant respectfully disagrees with the Examiner’s interpretation of

independent claim 11 and respectfully submits that independent claim 11 recites limitations similar to those in independent claim 7.

It is respectfully noted that independent claim 11 recites comparing an RDS of a present unit block to an RDS of a previous unit block to allocate at least one merging bit and the RDS up to the present unit block is simultaneously updated to prepare for allocation of at least one merging bit for a next unit block. Therefore, it is respectfully submitted that the previous arguments with regard to independent claim 7 are applicable to independent claim 11 and it is respectfully asserted that Tanaka also fails to disclose all the limitations of independent claim 11.

It is respectfully noted that independent claims 1 and 8 have been amended to recite adding at least one merging bit to each modulation-coded unit block. It is respectfully submitted that Tanaka fails to disclose this limitation.

As previously noted with regard to the rejection of independent claim 7, Tanaka discloses that the “MSB of the 15-bit pattern [of the code word] serves as a merging bit.” (emphasis added) Therefore, it is respectfully submitted that Tanaka does not disclose adding the merging bit to each modulation-coded unit block, as recited in independent claims 1 and 8, but rather discloses that one of the modulation-coded data bits is the merging bit.

It is respectfully asserted that Tanaka fails to disclose each element of independent claims 1, 7, 8 and 11 and, therefore, the claims are allowable over the cited reference. It is further respectfully asserted that claims 4-6, which depend from claim 1, claims 10 and 18-20, which depend from claim 8, and claim 14, which depends from claim 11, also are allowable over the cited reference.

§ 103 Rejections

Claims 2, 9, 12 and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tanaka. This rejection is respectfully traversed.

It is respectfully noted that the Federal Circuit has provided that an Examiner must establish a case of prima facie obviousness. Otherwise the rejection is incorrect and must be overturned. As the court recently stated in In re Rijkaert, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993):

It is further respectfully noted that “In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. Only if that

burden is met, does the burden of coming forward with evidence or argument shift to the applicant. ‘A prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art.’ If the examiner fails to establish a prima facie case, the rejection is improper and will be overturned.” (citations omitted.)

As previously respectfully asserted, independent claims 1, 7, 8 and 11 are allowable over Tanaka, which fails to disclose adding at least one merging bit to each modulation-coded unit block, as recited in independent claims 1 and 8, and evaluating the RDS to select at least one merging bit and updating the RDS for selecting at least one merging bit, as recited in independent claims 7 and 11. It is respectfully submitted that these limitations would not have been “obvious to a person of ordinary skill in the art” and, therefore, it is respectfully asserted that independent claims 1, 7, 8 and 11 also are allowable over the “ordinary skill in the art.” It is further respectfully asserted that claim 2, which depends from claim 1, claim 9, which depends from claim 8, claim 12, which depends from claim 11, and claim 15, which depends from claim 7, also are allowable over Tanaka and the “ordinary skill in the art.”

Claims 3, 13, 16 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tanaka in view of Immink et al. (“Immink” U.S. Patent No. 5,920,272). This rejection is respectfully traversed.

It is respectfully submitted that Immink fails to cure the deficiencies of Tanaka with respect to adding at least one merging bit to each modulation-coded unit block, as recited in independent claims 1 and 8, and evaluating the RDS to select at least one merging bit and updating the RDS for selecting at least one merging bit, as recited in independent claims 7 and 11. Therefore, it is respectfully asserted that independent claims 1, 7, 8 and 11 are allowable over the cited references. It is further respectfully asserted that claim 3, which depends from claim 1, claim 13, which depends from claim 11, claim 16, which depends from claim 7, and claim 17, which depends from claim 8, also are allowable over the cited references.

CONCLUSION

In light of the above remarks, Applicant submits that claims 1-20 of the present application are in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein; and no amendment made was for the purpose of narrowing the scope of any claim, unless Applicant has argued herein that such amendment was made to distinguish over a particular reference or combination of references.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (213) 623-2221 to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,

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